Amendments to the Drawings:

The attached sheets of drawings replace the original Figures 1-3. Formal drawings are submitted herewith, which match the changes to the specification. Approval by the Examiner is respectfully requested.

Attachment: Replacement Figures 1-3

REMARKS

Claims 1-11 are rejected. Claims 12-33 are withdrawn from consideration. Claim 1 has been amended. Claims 1-33 are presently pending in the application. Favorable reconsideration of the application in view of the following remarks is respectfully requested.

The basis for the amendment of claim 1 is found in claim 1 as originally filed.

Specification:

The Examiner indicates that Fig. 1 is not properly labeled, the description of fig 1 (lines 19-21 of the specification) does not match with Fig. 1, and, as addressed in Applicants' response of 3/20/06, replacement figures 1-2 have not been received by the office. Applicants have amended the specification to conform to the formal drawings submitted herein.

Rejection of Claims 1-11 under 35 USC § 112:

The Examiner has rejected Claims 1-11 under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention, stating that Claim 1 recites the term "precursor to a gelling agent" which is not clearly defined in the specification. Claim 1 has been amended to overcome this rejection.

Rejection Of Claims 1-3 and 9-10 Under 35 U.S.C. §102(b):

The Examiner has rejected Claims 1-3 and 9-10 under 35 U.S.C. 102(b) as being anticipated by Chen et al (EP 1127707 Al), indicating that Chen et al. disclose a coating composition comprising a dye-containing polymeric latex and gelling agent and at least one of the nickel metallized dye of the reference anticipates the dyes (formula (I) and formula (II)) of present application, for claims 9-10, Chen et al. disclose the microspheres (polymeric latex) to be comprised of synthetic polymeric materials.

Chen discloses an ink jet printing method, which employs a porous receiver and an ink jet composition, which provides improved light and dark stability. The ink jet printing method comprises the steps of A) providing an ink jet printer that is responsive to digital data signals; B) loading the printer with ink-receptive elements comprising a support having thereon a porous ink-receptive layer; C) loading the printer with an ink jet ink composition comprising a water-

dispersible polymeric latex having contained therein a water- insoluble dye; and D) printing on an ink-receptive substrate using the ink jet ink in response to the digital data signals.

The present invention relates to a coating composition for making a protein microarray, the composition comprising a gelling agent, and microspheres; the microspheres containing a low fluorescing dye represented by the Formula (I).

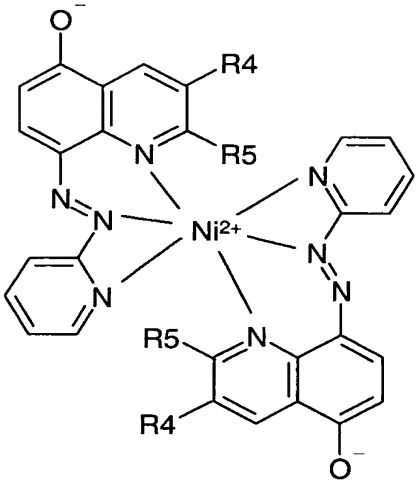
A claim is anticipated only if each and every element as set forth in the claim is found either expressly or inherently described in a single prior art reference. The identical invention must be shown in as complete detail as is contained in the claim.

Chen discloses a coating composition comprising a dye-containing polymeric latex, gelling agent nickel metallized dye of formula (I) and formula (II), however, Chen fails to mention a low fluorescing dye of formula (I) and / or formula (II). In addition, low fluorescence is not an inherent property of the dyes disclosed in Chen. Chen states "*A broad range of water-insoluble dyes may be used in the invention such as an oil dye, a disperse dye, a solvent dye, as disclosed in US-A-4,246,154 and US-A-5,852,074, or a metal-complex dye, such as the water-insoluble analogues of those described in US-A-5,997, 622 and US-A-6,001,161, i.e., a transition metal complex of an 8- heterocyclylazo-5-hydroxyquinoline.*" See [0010] In the present specification, Comparative dyes 1-4 are exemplified as having high fluorescence values (pg. 21, Table I of the present invention) and are outside the scope of the present claims to a low fluorescing dye. These dyes are oleophilic dyes, as evidenced by the description provided in U.S. Pat. No. 4,246,154, col. 2, lines 38-41 ("*In accordance with the present invention, finely divided particles of a vinyl polymer impregnated with a hydrophobic dye are dispersed in an aqueous medium in the state of a microemulsion without coagulating. The vinyl polymer is made of up extremely small particles having a diameter of preferably 0.1 micron or less and the stability of ink depends on the stability of vinyl polymer particles in the aqueous medium as opposed to the relatively unstable hydrophobic dye.*"); see also col. 9, lines 20-24 ("*In the present invention, azo dyes, metal complex type azo dyes, anthraquinone dyes, phthalocyanine dyes, triarylmethane dyes and other hydrophobic dyes which are soluble in organic solvents but not water may be*

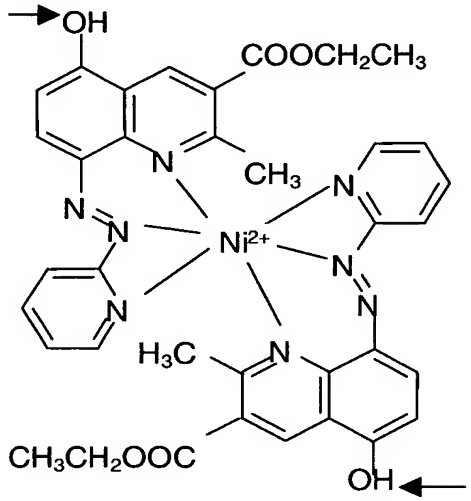
employed."); and see also col. 10, lines 14-20 ("*In addition, oleophilic dyes such as those disclosed in U.S. Pat. Nos. 3,652,284; 3,486,897; 2,751,298 and 3,506,443; Canadian Pat. No. 602,607; U.S. Pat. Nos. 3,443,939; 3,443,940; 3,443,941; 3,725,062; 3, 415,644; 3,415,645; 3,415,646; 3,647,437 and 3,635,707; and Belgian Pat. Nos. 757,959; 757,960; 810,195 and 788,268 may be also employed.*"). Comparative dye 3 of the present specification is specifically mentioned as a "disperse azo dye" in U.S. Pat. No. 4,968,318 (Bayer A-G). As described in EP127707, Claim 7: "*The method of Claim 1 wherein said water-insoluble dye comprises an oil dye, a disperse dye, a solvent dye, or a metal-complex dye.*" EP127707 makes no distinction between the low fluorescing metal-complex dyes of the presently claimed dye Formula I and high fluorescing disperse dyes, as in comparative dye 3.

The Examiner notes that, with respect to the recitation "for making a protein microarray" in line 1 of claim 1, the recitation has not been given patentable weight because the recitation occurs in the preamble, which is generally not accorded any patentable weight where it merely recites the purpose of a process or the intended use of a structure, and where the body of the claim does not depend on the preamble for completeness but, instead, the process steps or structural limitations are able to stand alone. See In re Hirao, 535 F.2d 67, 190 USPQ 15 (CCPA 1976) and Kropa v. Robie, 187 F.2d 150, 152, 88 USPQ 478, 481 (CCPA 195). Claim 1 has been amended to incorporate the recitation into the body of the claim.

The Examiner also notes that, with respect to recitation "low fluorescent dye represented by the formula (I)", the low fluorescence property in inherent in the dye of Chen et al because water-insoluble Dye-1 (analogue of control dye-1) of Chen et al (paragraph [0025]) reads on Formula (II) of instant application and both the dye have same structure and are expected to have the same property. Formula II appears as follows:



while the dye of Chen et al because water-insoluble Dye-1 (analogue of control dye-1) has the following structure:



As can be seen, the two structures are not identical. As a result, the reference fails to anticipate the present claims. The Applicants request that the Examiner reconsider and withdraw the rejection.

Rejection Of Claims 1-3 Under 35 U.S.C. §102(b):

The Examiner has rejected Claims 1-3 under 35 U.S.C. 102(b) as being anticipated by Evans et al (US 4420550), as Evans et al. disclose a coating composition comprising a dye-containing emulsion and gelling agent and at least one of the nickel metallized dye of the reference anticipates the dyes (formula (I) and formula (II)) of present application.

Evans relates to photography and more particularly to color diffusion transfer photography employing certain nondiffusible magenta dye-releasing compounds which, as a function of development of a silver halide

emulsion layer, release a diffusible magenta dye. The dye- releasing compound can be premetallized or a metal complex of the released dye can be formed in an image-receiving layer.

The present invention relates to a coating composition for making a protein microarray, the composition comprising a gelling agent or a precursor to a gelling agent, and microspheres; the microspheres containing a low fluorescing dye represented by the Formula (I).

A claim is anticipated only if each and every element as set forth in the claim is found either expressly or inherently described in a single prior art reference. The identical invention must be shown in as complete detail as is contained in the claim.

Evans discloses a certain nondiffusible magenta dye-releasing compounds which, as a function of development of a silver halide emulsion layer. The reference fails to disclose microspheres. The reference also fails to disclose a dye contained in a microsphere as presently claimed. In addition, the reference is silent with respect to low fluorescing dyes.

The Examiner notes that ""microspheres" by definition are suspensions when dispersed in liquid (source: QTL biosystem) and therefore, "emulsion" which is a "suspension" of small globules on one liquid with which the first will not mix, fits the definition of "microspheres"." However, a silver halide "emulsion" is not an emulsion, but is a dispersion. See http://www.cheresources.com/photochem.shtml ("*As already noted, the silver halides used in photography are dispersions of microscopic crystals in a colloidal binder that is usually bone gelatin. Although such dispersions are referred to as emulsions or photographic emulsions, they are really dispersions.*"), included in the previous response dated 3/17/06 as Attachment 1, pg. 3/17, lines 1-4. Also, referring to the Attachment submitted in the previous response, pg. 5, silver halide grains are not spherical. MPEP Section 2111.01 indicates that the words of a claim must be given their "plain meaning" unless they are defined in the specification. Ordinary, simple English words, whose meaning is clear and unquestionable, absent any indication that their use in a particular context changes their meaning, are construed to mean exactly what they say. Chef America, Inc. v. Lamb-Weston, Inc., 358 F.3d 1371, 1372, 69 USPQ2d 1857 (Fed. Cir. 2004). The Merriam-Webster Online Dictionary defines microsphere as "a minute

sphere". Therefore, the term "microsphere" clearly is a minute sphere. The Merriam-Webster Online Dictionary defines sphere as a globular body, such as a ball or a solid that is bounded by a surface consisting of all points at a given distance from a point constituting its center. As can be seen from pg. 5 of previously submitted Attachment 1, silver halide emulsion grains are not solids bounded by a surface consisting of all points at a given distance from a point constituting its center. The Examiner also states that silver halide emulsion also falls under the definition of microsphere i.e. minute sphere (spherical and non-spherical particles). The Applicants respectfully request that the Examiner provide a reference indicating that microspheres can be non-spherical.

The Examiner notes that, with respect to the recitation "for making a protein microarray" in line 1 of claim 1, the recitation has not been given patentable weight because the recitation occurs in the preamble, which is generally not accorded any patentable weight where it merely recites the purpose of a process or the intended use of a structure, and where the body of the claim does not depend on the preamble for completeness but, instead, the process steps or structural limitations are able to stand alone. See In re Hirao, 535 F.2d 67, 190 USPQ 15 (CCPA 1976) and Kropa v. Robie, 187 F.2d 150, 152, 88 USPQ 478, 481 (CCPA 195). Claim 1 has been amended to incorporate the recitation into the body of the claim.

Rejection Of Claims 1-11 Under 35 U.S.C. §103(a):

The Examiner has rejected Claims 1-11 are again rejected under 35 U.S.C. 103(a) as being unpatentable over Noonan et al. (US 5334575) in view of Evans et al. (US 4420550), as Noonan et al. disclose a coating composition comprising a gelling agent and microsphere (beads) containing a magenta dye, and, as for claims 6-8, Noonan disclose that the beads size are approximately 0.1 to about 20um, and, although Noonan et al. disclose magenta dye but fail to disclose nickel metallized dye of formula (I) and formula (II) of present application, Evans et al. disclose a coating composition comprising magenta dye of formula (I) and (II) of present application, disclose that the metallized dye have less unwanted absorption that other metallizable dyes, and, therefore, given the above fact that magenta dye of present application (formula I and II) is know in the art as coating composition and is useful for its less absorptive properties, it would have been obvious at the time of the invention to a person of ordinary skill

in the art to substitute equivalent magenta dye of Evans et al in the coating composition of Noonan et al, with the expectation of obtaining a similarly useful dye-coating composition.

The Examiner notes that, with respect to the recitation "for making a protein microarray" in line 1 of claim 1, the recitation has not been given patentable weight because the recitation occurs in the preamble. Claim 1 has been amended to incorporate the recitation into the body of the claim

Noonan relates to the use of certain dye-containing beads in the donor element of a laser-induced thermal dye transfer system, specifically a monocolor dye donor element for laser-induced thermal dye transfer comprising a support having thereon a dye layer comprising solid, homogeneous beads which contain an image dye, a binder and a laser light-absorbing material, said beads being dispersed in a vehicle.

Evans relates to photography and more particularly to color diffusion transfer photography employing certain nondiffusible magenta dye-releasing compounds which, as a function of development of a silver halide emulsion layer, release a diffusible magenta dye. The dye- releasing compound can be premetallized or a metal complex of the released dye can be formed in an image-receiving layer.

The present invention relates to a coating composition for making a protein microarray, the composition comprising a gelling agent or a precursor to a gelling agent, and microspheres; the microspheres containing a low fluorescing dye represented by the Formula (l).

To establish a prima facia case of obviousness, there must be some suggestion or motivation in the reference or in the general knowledge available to one skilled in the art to modify the reference, there must be a reasonable expectation of success, and the prior art reference must teach or suggest all the claim limitations.

The references fail to suggest the modification to produce the presently claimed invention. The Examiner admits that Noonan et al. disclose a coating composition comprising a gelling agent, microsphere, and magenta dye but fail to disclose nickel metallized dye of formula (I) and formula (II) of present application. As discussed above, Evans discloses a silver halide "emulsion" which is a dispersion of silver halide particles, not an emulsion, and, hence, not a

microsphere, and fails to mention a dye contained in a microsphere. Neither reference mentions low fluorescing dyes of Formula I or II. At best the combination of the references would provide a composition containing a gelling agent, silver halide particles, microspheres and a magenta dye of Formula I or II.

The present invention provides a microarray that is less costly and easier to prepare than those previously disclosed, and further can be used in a colored microarray device such as described herein wherein green light absorbance is desired to be maximized and fluorescence of the dye imbibed in the colored polystyrene microsphere bead is desired to be minimized. The references are silent with respect to the control of fluorescence levels in a microsphere for use in microarrays and therefore provide no likelihood of success in the use or identification of a low fluorescing dye of Formula I. There are a very large number of compounds known to those skilled in the art, which may be utilized as dyes. There are, further, a tremendous number of types of microspheres. Microarray systems are very complex and unpredictable and the fact that two technologies are independently successful does not indicate that the combination will be useful or beneficial. As indicated in the present specification, "there are no general guideline parameters with which a colorant scientist may predict the fluorescence of any given colorant material. Therefore, the colorant scientist must undertake an empirical approach to the discovery of colorant materials that are non-fluorescent. It appears that dye materials containing a specific halogen functionality are particularly likely to possess the property of very low fluorescence. Thus, the dyes of this invention have been found to have good solubility in the organic solvents required for bead coloration, high extinction, and remarkably low fluorescence when imbibed in a polystyrene microsphere bead." (pg. 5, line 28 - pg. 6, line 5 of the present specification). At most, the Examiner has set forth an argument that it would be "obvious to try" the combination of the cited references. Therefore, there is no reasonable expectation of success found in any combination of the cited references.

The references fail to include all the limitations of the present claims. There is no mention in either reference or the combination of the two relating to microspheres containing a low fluorescing dye as presently claimed.

The present invention also provides surprising results, as dye materials containing a specific halogen functionality are particularly likely to

possess the property of very low fluorescence. As indicated on pg. 21, Table I of the specification, the presently claimed dyes of Formula I are low fluorescing, when compared to other, similar dyes.

In summary, the references fail to suggest, alone or in combination, all the limitations of the present claims, fail to provide a likelihood of success and fail to provide an suggestion to combine or modify the references to produce the presently claimed invention, the Applicants request that the Examiner reconsider and withdraw the rejection.

Rejection Of Claims 1-11 Under 35 U.S.C. §103(a):

The Examiner has rejected Claims 1-11 under 35 U.S.C. 103(a) as being obvious over Qiao et al. (US 5334575) in view of Evans et al. (US 4420550), as Qiao et al disclose a microarray coating composition comprising a gelling agent and microsphere (beads) containing a magenta dye, as for claims 6-8, Qiao et al disclose beads size of 1 to 50 microns and as for claims 9-11, Qiao et al disclose the beads comprising polystyrene, Qiao et al disclose magenta dye but fail to disclose nickel metallized dye of formula (I) and formula (II) of present application, however, Evans et al. disclose a coating composition comprising magenta dye of formula (I) and (II) of present application. Evans et al. also disclose that the metallized dye have less unwanted absorption that other metallizable dyes, and, therefore, given the above fact that magenta dye of present application (formula I and II) is know in the art as coating composition and is useful for its less absorptive properties, it would have been obvious at the time of the invention to a person of ordinary skill in the art to substitute equivalent magenta dye of Evans et al in the coating composition of Qiao et al, with the expectation of obtaining a similarly useful microarray coating composition.

The Examiner notes that, with respect to the recitation "for making a protein microarray" in line 1 of claim 1, the recitation has not been given patentable weight because the recitation occurs in the preamble. Claim 1 has been amended to incorporate the recitation into the body of the claim.

Qiao concerns biological microarray technology in with respect to a nucleic acid microarray system and a method of identifying nucleic acid samples comprising: providing a microarray including a substrate coated with a composition including a population of nucleic acid probe modified micro- spheres immobilized in a coating containing a gelling agent or a precursor to a gelling

agent, wherein a first portion of the micro- spheres is submerged in the gelatin coating and a second portion is exposed above the gelatin coating and is substantially free of gelatin, at least one sub-population of the population micro-spheres containing an optical barcode generated from at least one colorant associated with the micro-spheres and including a nucleic acid probe sequence; contacting the array with a target nucleic acid sequence; and detecting the color barcode of the sub- population of micro-spheres due to the interaction of the probe nucleic acid sequence and the fluorescently/chemiluminescently labeled nucleic acid sample target nucleic acid sequence.

Evans relates to photography and more particularly to color diffusion transfer photography employing certain nondiffusible magenta dye-releasing compounds which, as a function of development of a silver halide emulsion layer, release a diffusible magenta dye. The dye- releasing compound can be premetallized or a metal complex of the released dye can be formed in an image-receiving layer.

The present invention relates to a coating composition for making a protein microarray, the composition comprising a gelling agent or a precursor to a gelling agent, and microspheres; the microspheres containing a low fluorescing dye represented by the Formula (I).

To establish a prima facia case of obviousness, there must be some suggestion or motivation in the reference or in the general knowledge available to one skilled in the art to modify the reference, there must be a reasonable expectation of success, and the prior art reference must teach or suggest all the claim limitations.

The references fail to suggest the modification to produce the presently claimed invention. Qiao discloses an assay method relying on the detection of fluorescence or chemiluminescence (Abstract) and specifically exemplifies Dye 1 in col. 10, lines 5-20, utilized in inventive Formulation 1 (col. 9, lines 6-34). Dye 1 is equivalent to Comparative dye 4 of the present invention. As discussed above, Evans discloses a silver halide "emulsion" which is a dispersion of silver halide particles, not an emulsion, and, hence, not a microsphere. Neither reference mentions low fluorescing dyes of Formula I or II. At best the combination of the references would provide a composition containing

a gelling agent, silver halide particles, microspheres and a magenta dye of Formula I or II.

The present invention provides a microarray that is less costly and easier to prepare than those previously disclosed, and further can be used in a colored microarray device such as described herein wherein green light absorbance is desired to be maximized and fluorescence of the dye imbibed in the colored polystyrene microsphere bead is desired to be minimized. The references are silent with respect to the control of fluorescence levels in a microsphere for use in microarrays and therefore provide no likelihood of success in the use or identification of a low fluorescing dye of Formula I. There are a very large number of compounds known to those skilled in the art, which may be utilized as dyes. There are, further, a tremendous number of types of microspheres. Microarray systems are very complex and unpredictable and the fact that two technologies are independently successful does not indicate that the combination will be useful or beneficial. As indicated in the present specification, "there are no general guideline parameters with which a colorant scientist may predict the fluorescence of any given colorant material. Therefore, the colorant scientist must undertake an empirical approach to the discovery of colorant materials that are non-fluorescent. It appears that dye materials containing a specific halogen functionality are particularly likely to possess the property of very low fluorescence. Thus, the dyes of this invention have been found to have good solubility in the organic solvents required for bead coloration, high extinction, and remarkably low fluorescence when imbibed in a polystyrene microsphere bead." (pg. 5, line 28 - pg. 6, line 5 of the present specification). At most, the Examiner has set forth an argument that it would be "obvious to try" the combination of the cited references. Therefore, there is no reasonable expectation of success found in any combination of the cited references.

The references fail to include all the limitations of the present claims. There is no mention in either reference or the combination of the two relating to microspheres containing a low fluorescing dye as presently claimed.

The present invention also provides surprising results, as dye materials containing a specific halogen functionality are particularly likely to possess the property of very low fluorescence. As indicated on pg. 21, Table I of

the specification, the presently claimed dyes of Formula I are low fluorescing, when compared to other, similar dyes.

In summary, the references fail to suggest, alone or in combination, all the limitations of the present claims, fail to provide a likelihood of success and fail to provide an suggestion to combine or modify the references to produce the presently claimed invention, the Applicants request that the Examiner reconsider and withdraw the rejection.

The Examiner also indicates, in this case Noonan et al ('575 patent), Qiao et al ('620 patent) and Qiao et al (US 2003/0224361) disclose magenta dye in the composition and Evan et al disclose that nickel metallized dye have less unwanted absorption than other metallizable dye, and, since nickel metallized magenta dye have added advantage (i.e. less unwanted absorption), it would be obvious to substitute other magenta dye with the nickel metallized magenta dye of Evans et al., with the expectation to decrease unwanted absorption, with a reasonable expectation of success. However, the present claims relate to low fluorescing compounds. The Applicant is unaware of any information in the references or otherwise available to those of ordinary skill in the art providing a relationship between the fluorescence and absorbance of a compound.

Rejection Of Claims 1-11 Under 35 U.S.C. §103(a):

The Examiner has rejected Claims 1-11 under 35 U.S.C. 103(a) as being obvious over Qiao et al. (US 2003/0224361 Al) in view of Evans et al. (US 4420550), as Qiao et al disclose a microarray coating composition comprising a gelling agent and microsphere (beads) containing a magenta dye, as for claims 6-8, Qiao et al disclose beads size of 1 to 50 microns and as for claims 9-11, Qiao et al disclose the beads comprising polystyrene, Qiao et al disclose magenta dye but fail to disclose nickel metallized dye of formula (I) and formula (II) of present application, however, Evans et al. disclose a coating composition comprising magenta dye of formula (1) and (II) of present application, and disclose that the metallized dye have less unwanted absorption that other metallizable dyes, therefore, given the above fact that magenta dye of present application (formula I and II) is know in the art as coating composition and is useful for its less absorptive properties, it would have been obvious at the time of the invention to a person of. ordinary skill in the art to substitute equivalent magenta dye of Evans

et al in the coating composition of Qiao et al, with the expectation of obtaining a similarly useful microarray coating composition.

The Examiner notes that, with respect to the recitation "for making a protein microarray" in line 1 of claim 1, the recitation has not been given patentable weight because the recitation occurs in the preamble. Claim 1 has been amended to incorporate the recitation into the body of the claim.

Qiao concerns biological microarray technology in general, particularly, an array of microspheres on a gelatin substrate and a method of exposing the surface of the microspheres to analytes contained in test samples. Preferably, the microspheres bear capture agents (also called probes) on their surfaces. The method of making a microarray comprises providing a support; coating on the support a fluid composition containing microspheres and gelatin; immobilizing the microspheres in the gelatin coating; partially digesting the gelatin with an enzyme to expose surfaces of the microspheres; and removing the enzyme and digested gelatin from the coating.

Evans relates to photography and more particularly to color diffusion transfer photography employing certain nondiffusible magenta dye-releasing compounds which, as a function of development of a silver halide emulsion layer, release a diffusible magenta dye. The dye- releasing compound can be premetallized or a metal complex of the released dye can be formed in an image-receiving layer.

The present invention relates to a coating composition for making a protein microarray, the composition comprising a gelling agent or a precursor to a gelling agent, and microspheres; the microspheres containing a low fluorescing dye represented by the Formula (I).

To establish a prima facia case of obviousness, there must be some suggestion or motivation in the reference or in the general knowledge available to one skilled in the art to modify the reference, there must be a reasonable expectation of success, and the prior art reference must teach or suggest all the claim limitations.

The references fail to suggest the modification to produce the presently claimed invention. Qiao discloses an assay method relying on the detection of fluorescence or chemiluminescence ([0031]) and specifically exemplifies Dye 1 on pg. 4, utilized in inventive Formulation 1 ([0040]-[0044]).

Dye 1 is equivalent to Comparative dye 4 of the present invention. As discussed above, Evans discloses a silver halide "emulsion" which is a dispersion of silver halide particles, not an emulsion, and, hence, not a microsphere. Neither reference mentions low fluorescing dyes of Formula I or II. At best the combination of the references would provide a composition containing a gelling agent, silver halide particles, microspheres and a magenta dye of Formula I or II.

The present invention provides a microarray that is less costly and easier to prepare than those previously disclosed, and further can be used in a colored microarray device such as described herein wherein green light absorbance is desired to be maximized and fluorescence of the dye imbibed in the colored polystyrene microsphere bead is desired to be minimized. The references are silent with respect to the control of fluorescence levels in a microsphere for use in microarrays and therefore provide no likelihood of success in the use or identification of a low fluorescing dye of Formula I. There are a very large number of compounds known to those skilled in the art, which may be utilized as dyes. There are, further, a tremendous number of types of microspheres. Microarray systems are very complex and unpredictable and the fact that two technologies are independently successful does not indicate that the combination will be useful or beneficial. As indicated in the present specification, "there are no general guideline parameters with which a colorant scientist may predict the fluorescence of any given colorant material. Therefore, the colorant scientist must undertake an empirical approach to the discovery of colorant materials that are non-fluorescent. It appears that dye materials containing a specific halogen functionality are particularly likely to possess the property of very low fluorescence. Thus, the dyes of this invention have been found to have good solubility in the organic solvents required for bead coloration, high extinction, and remarkably low fluorescence when imbibed in a polystyrene microsphere bead." (pg. 5, line 28 - pg. 6, line 5 of the present specification). At most, the Examiner has set forth an argument that it would be "obvious to try" the combination of the cited references. Therefore, there is no reasonable expectation of success found in any combination of the cited references.

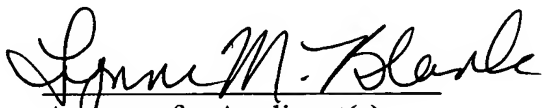
The references fail to include all the limitations of the present claims. There is no mention in either reference or the combination of the two relating to microspheres containing a low fluorescing dye as presently claimed.

The present invention also provides surprising results, as dye materials containing a specific halogen functionality are particularly likely to possess the property of very low fluorescence. As indicated on pg. 21, Table I of the specification, the presently claimed dyes of Formula I are low fluorescing, when compared to other, similar dyes.

In summary, the references fail to suggest, alone or in combination, all the limitations of the present claims, fail to provide a likelihood of success and fail to provide an suggestion to combine or modify the references to produce the presently claimed invention, the Applicants request that the Examiner reconsider and withdraw the rejection.

It is believed that the foregoing is a complete response to the Office Action and that the claims are in condition for allowance. Applicants respectfully request that this amendment be admitted in order to present the rejected claims in better form for consideration on appeal.

Respectfully submitted,



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Enclosures: Replacement Figures 1-3
Copies of Formal Drawings

If the Examiner is unable to reach the Applicant(s) Attorney at the telephone number provided, the Examiner is requested to communicate with Eastman Kodak Company Patent Operations at (585) 477-4656.